

Remarks

The application is reviewed in light of the final Office Action mailed March 31, 2004. Reconsideration of the Office Action is earnestly requested in view of the foregoing Amendments and the following Remarks.

Claims 2, 5 –9, 11, and 14 – 26 are pending in the application. By the foregoing Amendments, claim 14 has been amended. Non-elected claims 16-26 have been withdrawn without prejudice. No new matter is introduced by the Amendments.

The Examiner has rejected claims 2, 5 –9, 11, and 14 – 15 under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicants regard as the invention. Applicants respectfully submit that claims 2, 5 –9, 11, and 14 – 15 as amended are in the form satisfying the requirements under 35 U.S.C. 112, second paragraph.

In particular, the Examiner has stated that the phrase “the sample container being usable for holding the sample within the container at an operating temperature higher than a room temperature” in independent claim 14 renders the claims indefinite because of failure to define the room temperature and the operating temperature. The Examiner has further stated that the room temperature includes a wide range of temperature which depends on the sample contained in the container, such as a temperature of an office, a storage warehouse, a refrigerator, or a freezer.

Applicants respectfully disagree. As is well known in the art, a room temperature refers to “an indoor temperature of from 20 to 25°C (68 to 77°F)”. See for example the American Heritage Dictionary of the English Language, fourth edition, which is also available at <http://www.yourdictionary.com>. See also “Metric System Temperature (U.S. Metric Association)” at <http://lamar.colostate.edu/~hillger/temps.htm>. Claim 14 clearly defines the operating temperature for holding the sample therein is higher than the room temperature (i.e., between 20 and 25°C). As such, because the claimed invention

recites the operating temperature relative to the room temperature well known in the art, the scope of each of the claims is clearly ascertainable by one ordinarily skilled in the art. Therefore, claims 2, 5 –9, 11, and 14 – 15 as amended satisfy the requirement of definiteness under 35 U.S.C. 112, second paragraph.

The Examiner has rejected claims 2, 11, and 14 –15 under 35 U.S.C. 103(a) as being obvious from Fergusson (U.S. Patent No. 4,004,904) in view of what was well known in the art, as exemplified by Quadracci et al. (U.S. Patent No. 5,347,726, referred as Quadracci).

Claims 2, 11, and 14-15 of the invention are directed, as independent claim 14 specifically recites, to a method for labeling a sample container, to provide an identification to a sample to be received therein, during a manufacturing process of the sample container, where the sample container is usable for holding the sample within the container at an operating temperature higher than a room temperature. By applying a marking agent (during the manufacturing process of the sample container) for identification of the sample therein to a surface of the sample container at a temperature interval higher than the operating temperature, the claimed invention can ultimately prevent contamination of the sample to be received therein and used at the operating temperature, as recited in the claims.

On the contrary, Fergusson is directed, as specified in claim 15 of the reference, to a system (and its associated method) for identifying, by simply marking, particular glass bottles emanating from a plurality of forming molds in a predetermined sequence, said bottles being positioned into rows prior to conveyance of such rows to a marking area remote from said forming molds, such identification of glass bottles being carried out by, among other means, marking means at said marking area receiving said output signals from said first and second means and responsive thereto providing marking of particular (i.e., defective) bottles with each marking being indicative of the particular forming mold from which said bottles emanated.

As such, unlike to the present invention for providing identification of a sample to be received within the sample container without subsequent contamination of the sample by the applied marking agent, Fergusson is directed to solve a different problem, i.e., identification, by simply marking, of defective bottles with each marking being indicative of the particular (e.g., defective) forming mold from which said bottles emanated for subsequently removing such defective bottles. See claim 15, the Abstract, column 4, lines 18-27 of Fergusson. Thus, Fergusson bears nothing to labeling of a sample container for identification of a sample to be received therein, wherein the sample container has a particular usage for holding the sample operable at a temperature higher than the room temperature as required by the present invention as claimed. Contrary thereto, the marking in Fergusson is simply for identifying defective bottles for ultimately removing them during the manufacturing process and does not involve any sample to be used at an operating temperature which is substantially higher than a room temperature (preferably, up to 300°C). Moreover, Fergusson bears nothing to preventing subsequent contamination of the sample by the applied marking agent in which such contamination can be easily occurred because the sample is to be used at such a higher temperature.

Accordingly, it is respectfully submitted that Fergusson is non-analogous art, involving a different field of endeavor than the present invention. As discussed, Fergusson is not reasonably pertinent to the particular problem with which the applicants were concerned. A person of ordinary skill in the art will not look at Fergusson to solve the particular problem identified by the applicants (i.e., labeling a sample container to provide an identification to a sample to be received in the sample container in a manner preventing a subsequent contamination) because Fergusson teaches nothing about that.

In addition, it is further noted that "[A] patentable invention may lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the 'subject matter as a whole' which

should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103." *In re Spinnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). See also MPEP §2141.01(a) and §2141.02.

Moreover, and being as important as the discussion above, Fergusson fails to disclose or teach each and every limitation of claims 2, 11, and 14-15 of the invention.

Claims 2, 11, and 14-15 of the invention require the steps of: (a) producing a sample container in a heated environment, wherein the sample container is usable for holding a sample within the container at an operating temperature higher than a room temperature (*please note that this underlined feature is introduced into the body of the claims instead of and from the preamble thereof in light of the Examiner's remark in the Office Action*); (b) cooling the heated sample container to a temperature interval between a maximum temperature occurring during the production of the sample container and the operating temperature of the sample to be received therein; and, (c) applying a marking agent for identification of the sample to a surface of the sample container at the temperature interval such that volatile constituents of the marking agent are evaporated during the manufacturing process of the sample container to prevent contamination of the sample to be received within the sample container and usable at the operating temperature.

Fergusson discloses or teaches, among other means or methods (for identifying particular defective glass bottles emanating from a plurality of forming molds), producing a plurality of glass bottles by a plurality of forming molds under a heated condition; conveying the plurality of bottles into rows (here, as an incidental result, cooling may be occurred to a certain degree); and, marking at a remote marking area (after receiving the output signals from the first and second means and responsive thereto) providing marking of bottles with each marking being indicative of the particular (i.e., defective) forming mold from which said bottles emanated.

Fergusson, however, fails to disclose or teach the steps of: (a) producing a sample container in a heated environment where the sample container is usable for holding a sample within the container at an operating temperature higher than a room temperature; (b) cooling the heated sample container to a temperature interval between a maximum temperature occurring during the production of the sample container and the operating temperature (which is higher than a room temperature) of the sample to be received therein; and, (c) applying a marking agent for identification of the sample to a surface of the sample container at the temperature interval such that volatile constituents of the marking agent are evaporated during the manufacturing process of the sample container to prevent contamination of the sample to be received within the sample container and (which is) usable at the operating temperature.

Contrary to the Fergusson's disclosure where the group of glass bottles produced thereby do not have any bearings to any kind of sample containers for holding a sample at an elevated temperature, the claims of the present invention specifically require producing a sample container which is usable for holding the sample within the container at an operating temperature higher than a room temperature. Contrary to the Fergusson's disclosure in which marking is applied for simply marking or identifying particular defective bottles amongst a group of bottles emanating from a plurality of forming molds, the claims of the present invention specifically require that the marking agent is applied for identification of the sample to be received within the sample container. Contrary to the Fergusson's disclosure in which any particular temperature for applying the marking is not disclosed or suggested, the claims of the present invention specifically require that the marking agent is applied at the temperature interval such that volatile constituents of the marking agent are evaporated during the manufacturing process of the sample container to prevent contamination of the sample to be received within the sample container. In the present invention, the marking agent is particularly applied at such a temperature interval of high temperature (preferably between 300°C and 600°C) such that volatile constituents of the marking agent are

evaporated during the manufacturing process of the sample container to prevent contamination of the sample to be received within the sample container.

In the Office Action, official notice is taken by the Examiner that drying a marking agent, such as an ink, by a drying means causes to evaporate various solvents and gases from the ink that causes majority of the air contamination is well known to one of ordinary skill in the art, as evidenced by the Quadracci (U.S. Patent No. 5,347,726). In addition, the Examiner has further provided the following reasoning for the above-mentioned obviousness rejection which states that: "It would have been obvious to an artisan of ordinary skill in the art at the time the invention was made to provide the marking operation at the temperature that is above the degassing temperature of the ink for the purpose of evaporating any ink solvents and gases may produced by the marking agent before outputting the container as an acceptable ware to be utilized thereafter. Such modification would have created safe and gas-free acceptable ware of containers." It is respectfully submitted that Quadracci identifies a problem (and a specific solution thereto) associated with printing of images on a web, more particularly, with drying of printed images on the web, that is, a "web streaking problem" in which the printed web displays streaking marks as the web exits the chilled roller unit of a web-manufacturing equipment of a particular design. See from column 1, line 51, to column 2, line 15 in Quadracci. This and any other problems solved in Quadracci do not have any bearings to the particular problem with which the present invention is concerned, i.e., labeling a sample container to provide an identification to a sample therein in a manner preventing contamination of the sample to be subsequently received within the sample container. The present invention solves the particular problem by evaporating volatile constituents of the marking agent during the manufacturing process of the sample container to prevent contamination of the sample by the applied marking agent. As such, it is respectfully submitted that Quadracci is direct to a web manufacturing process for improving the quality of printed color-image thereon, and does not disclose or teach anything related to the sample container and/or identification of a sample in a manner as recited in the claimed invention. Therefore, Quadracci is not relevant and

thus, is not analogous for one of ordinary skill in the art to reasonably refer to solve a problem of the invention (i.e., identification of a sample and preventing contamination of the sample within the sample container). As such, since a reasonable person in the art does not have any reason to look at Quadracci, Quadracci should not be used to show: that drying a marking agent, such as an ink, by a drying means causes to evaporate various solvents and gases from the ink that causes contamination of the sample contained in a sample container and usable at a higher temperature, is well known to one of ordinary skill in the art. Accordingly, Applicants respectfully submit that the rejection is based upon a defective official notice without providing relevant supporting in that regards. Unless having a pertinent showing that an artisan of ordinary skill in the art knows at the time the invention was made that contamination of a sample can be prevented by applying a marking agent to the sample container at a high temperature during manufacturing of the sample container as suggested by the invention, the rejection must be overreaching based on impermissible hindsight derived after looking at the description of the present invention.

It is noted that "[I]n determining the differences between the prior art and the claims, the question under 35 U.S.C. 103 is not whether the differences themselves would have been obvious, but whether the claimed invention as a whole would have been obvious. *Stratoflex, Inc. v. Aeroquip Corp.*, 713 F.2d 1530, 218 USPQ 871 (Fed. Cir. 1983); *Schenck v. Nortron Corp.*, 713 F.2d 782, 218 USPQ 698 (Fed. Cir. 1983). See also MPEP §2141.02. It is further noted that "[A] patentable invention may (even) lie in the discovery of the source of a problem even though the remedy may be obvious once the source of the problem is identified. This is part of the 'subject matter as a whole' which should always be considered in determining the obviousness of an invention under 35 U.S.C. § 103." *In re Spinnoble*, 405 F.2d 578, 585, 160 USPQ 237, 243 (CCPA 1969). See also MPEP §2141.01(a) and §2141.02.

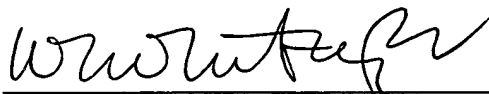
In summary, as discussed above, neither Fergusson nor Quadracci is analogous art pertaining to solving of the particular problem that the invention is directed to solve,

and furthermore, Neither Fergusson nor Quadracci, alone and in combination there-with, discloses or teaches each and every limitation of claims 2, 11, and 14-15 of the invention. Accordingly, in view of foregoing, Applicants respectfully submit that claims 2, 11, and 14-15 of the application are patentable over the cited art of record.

The Examiner has further rejected claims 5 – 9 under 35 U.S.C. 103(a) as being obvious from Fergusson (U.S. Patent No. 4,004,904) in view of Baldwin (U.S. Patent No. 5,510,610). Claims 5 – 9 each depend from independent claim 14, are therefore patentable for at least under the same reasons as set forth with respect to claim 14. As discussed, Fergusson is not analogous art pertaining to solving of the problem that the invention is directed to solve, and furthermore, Fergusson does not disclose or teach each and every limitation of claims 5 - 9 of the invention as discussed above. Baldwin is not necessary to be discussed herein.

Accordingly, applicants respectfully submit that all of the claims currently pending in the application (i.e., claims 2, 5 –9, 11, and 14 – 15) are now in condition for allowance. Reconsideration and early notice to that effect is earnestly requested.

Respectfully submitted,



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